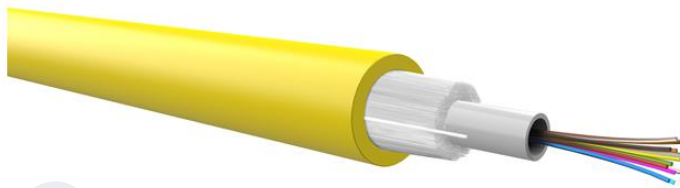
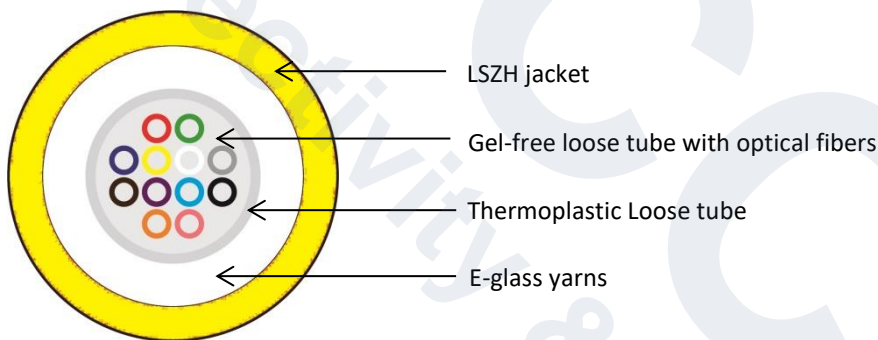


Cable type	I-B(ZN)BH
Description	Central loose tube cable, 6-24 OF, dielectric armour, LSZH jacket, B2ca



I-B(ZN)BH

6 to 24 cores central Loose tube optical cable for indoor use type I-B(ZN)BH, dielectric protection against the action of rodents, external jacket in LSZH (Low Smoke Zero Halogen), Euroclass B2ca s1a,d0,a1. The optical fibres, with 250µm primary coating, are contained inside a single dry-core thermoplastic tube without buffering gel.



Constructive characteristics

Tube	Gel-free Loose tube
Filler protection	E-glass yarns
Optical fiber type	Single-mode 9/125; multimode 50/125 OM3, OM4
Outer jacket material	LSZH (Low Smoke Zero Halogen)
Armour	Dielectric
Cable outer diameter	From 6,5 to 7 mm
Nominal weight	From 46 to 51 Kg/Km
Marking	CCS by Qubix - "product code" - FO Cable I-B(ZN)BH - "1xn FO" "fiber type" - dielectric armoured FR-LSZH jacket - meters - lot - FID - Euroclass B2ca s1a,d0,a1 - n° DOP

Mechanical and environmental properties

Use	Indoor
Bend. radius (installation)	20 x outside diameter
Bend. radius (long term)	15 x outside diameter
Max. pull strength	1500 N (150 kg max.)
Crush resistance	1500 N/dm
Installation temperature	from -5°C to +50°C
Operating temperature	from -25°C to +60°C

Cable type	I-B(ZN)BH
Description	Central loose tube cable, 6-24 OF, dielectric armour, LSZH jacket, B2ca

Reference standards

Cables and optical fibers	EN 60793 EN 60794-1
Structured cabling	EN 50173-1 ISO/IEC 11801 ANSI/TIA 568.3-D

Fire behavior

CRP regulation	EN 50575 EN 13501-6 Euroclass B2ca s1a,d0,a1
Fire reaction	IEC 60332-1-2; IEC 60332-3-24; EN 50399
Smoke density	IEC 61034
Acid gas emission	IEC 60754-2

Optical cables suitable for single or bundle installations in areas with major risk in case of fire (where the use of cables in Euroclass Cca s1b,d1,a1 or higher is required).

Outer jacket color

9/125 OS2	Yellow
50/125 OM3	Aqua
50/125 OM4	Erika Violet

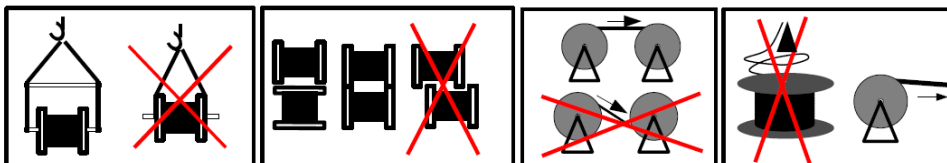
Packaging

Drum	2100 mt ± 5%
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Reference codes

Cores number	9/125 OS2	50/125 OM3	50/125 OM4
1x6 fibers	2008432	2008436OM3	2008436OM4
1x12 fibers	2008434	2008438OM3	2008438OM4
1x24 fibers	2008435	2008439OM3	2008439OM4

Recommendations of use



Cable type	I-B(ZN)BH
Description	Central loose tube cable, 6-24 OF, dielectric armour, LSZH jacket, B2ca

MULTIMODE OPTICAL FIBER SPECIFICATIONS

Optical fiber type	50/125 OM2	50/125 OM3	50/125 OM4	62,5/125 OM1
Core diameter	50 ± 2,5 µm	50 ± 2,5 µm	50 ± 2,5 µm	62,550 ± 2,5 µm
Cladding diameter	125 ± 1 µm	125 ± 1 µm	125 ± 1 µm	125 ± 1 µm
Primary coating diameter	242 ± 5 µm	242 ± 5 µm	242 ± 5 µm	242 ± 5 µm
Cladding Non-Circularity	≤ 0,7%	≤ 0,7%	≤ 0,7%	≤ 0,7%
Core Non-Circularity	≤ 5%	≤ 5%	≤ 5%	≤ 5%
Concentricity error core/cladding	≤ 1 µm	≤ 1 µm	≤ 1 µm	≤ 1 µm
Concentricity error cladding/coating	≤ 10 µm	≤ 10 µm	≤ 10 µm	≤ 10 µm
Atten. typical/max λ=850 nm	2,0 – 3,5 dB/Km	2,0 – 3,5 dB/Km	2,0 – 3,5 dB/Km	2,6 – 3,5 dB/Km
Atten. typical/max λ=1300 nm	0,5 – 1,5 dB/Km	0,5 – 1,5 dB/Km	0,5 – 1,5 dB/Km	0,5 – 1,5 dB/Km
Bandwidth λ=850 nm	500 MHz·Km	1500 MHz·Km	3500 MHz·Km	220 MHz·Km
Bandwidth λ=1300 nm	500 MHz·Km	500 MHz·Km	500 MHz·Km	500 MHz·Km
Group Index @ 850 nm	1,482	1,482	1,482	1,496
Group Index @ 1300 nm	1,477	1,477	1,477	1,491
Numerical aperture	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,275 ± 0,015

SINGLE-MODE OPTICAL FIBER SPECIFICATIONS

Optical fiber type	9/125 OS2 (ITU G.652D)
Core diameter	9,0 ± 0,4 µm @1310 nm 10,1 ± 0,5 µm @ 1550 nm
Cladding diameter	125 ± 0,7 µm
Primary coating diameter	242 ± 7 µm
Cladding Non-Circularity	≤ 0,7%
Concentricity error core/cladding	≤ 0,5 µm
Concentricity error cladding/coating	≤ 12 µm
Attenuation typical/max λ=1310 nm	0,31 – 0,35 dB/Km
Attenuation typical/max λ=1550 nm	0,20 – 0,24 dB/Km
Attenuation typical/max λ=1625 nm	0,21 – 0,26 dB/Km
Group Index @ 1310 nm	1,4676
Group Index @ 1550 nm	1,4682
Chromatic @ 1550 nm	≤ 18 ps/(nm·Km)
Chromatic @ 1625 nm	≤ 22 ps/(nm·Km)
Cable cut-off wavelength	λ _{cc} ≤ 1260 nm
Zero-dispersion wavelength λ _o	1304-1324 nm
Slope at λ _o	S _o ≤ 0,092 ps/(nm ² ·Km)
PMD	≤ 0,1 ps/√Km

Optical fibers are fully compliant with IEC/EN 60793-1, IEC/EN 60793-2, EN 50173 and ISO/IEC 11801